DISTRIBUTED LEAST CHOICE FIRST ARBITER

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ABSTRACT OF THE DISCLOSURE

5   A distributed arbiter prioritizes requests for resources based on the number of requests made by each requester. Each resource gives the highest priority to servicing requests made by the requester that has made the fewest number of requests. That is, the requester with the fewest requests (least number of choices) is chosen first. Resources may be scheduled sequentially or in parallel. If a requester receives

10   multiple grants from resources, the requester may select a grant based on resource priority, which is inversely related to the number of requests received by a granting resource. In order to prevent starvation, a round robin scheme may be used to allocate a resource to a requester, prior to issuing grants based on requester priority.